

# Update on log hauling safety performance

The following information was shared by WorkSafeBC with BC Forest Safety Council trainers at a recent annual train the trainer session. Log hauling is one of five high risk areas in forestry that forms part of WorkSafeBC's forestry high risk strategy inspectional focus from 2018-2020.

In Q1-Q3 2018, WorkSafeBC officers have focused their inspections on the following elements of log transportation:

- Driving and road assessment
- Loading, offloading, and securing of load
- Best practices for maintenance work (lockout, access, and egress)
- Cab guards (bull boards) and seat belt use
- Three-point contact procedures.

The top five sections of the OHSR cited in orders during these inspections were:

- OHSR 16.35 – Securing tools and equipment
- OHSR 26.66(3) – Bunks and stakes (extensions and stake lines)
- OHSR 26.65(8) – Cab guard (markings and identification)
- OHSR 26.65(5) – Cab guard (record results of inspections before shift)
- OHSR 26.71.2(2) – Daily log.

In terms of claims summaries, WorkSafeBC shared the following information:

## Claims Summaries (CU732044 Log Hauling)

Injury Prevention	2013	2014	2015	2016	2017	2018 YTD
# Time-loss Claims	126	128	119	133	136	74
# Person Years	2,179	2,103	2,183	2,204	2,314	0
Injury Rate	5.8	6.1	5.5	6.0	5.9	
<b>Claim Summary</b>						
# Serious Injury Claims	32	36	27	39	45	17
Serious Injury Rate	1.5	1.7	1.2	1.8	1.9	

In terms of claims over the past five years (2013-2017), motor vehicle incidents, overexertion, fall on same level, fall from elevation and struck by were the leading types of incidents that led to claims in the log hauling CU.

## Claims Summaries (CU732044 Log Hauling)

Year Range: 2013 - 2017

Accident Type	Count	%	Source of Injury	Count	%
MVI	211	31.3	Vehicles	298	44.1
Overexertion	108	16.0	Working Surfaces	110	16.3
Fall on Same Level	76	11.3	Hand Tools	72	10.7
Fall from Elevation	75	11.1	Bodily Motion	35	5.2
Struck By	68	10.1	Trees, Plants	31	4.6
Exposure to Noise	29	4.3	Noise	29	4.3
Caught In	24	3.6	Metal Items	25	3.7
Struck Against	22	3.3	Miscellaneous	17	2.5
Involuntary Motion	20	3.0	Machines	13	1.9
Other Bodily Motion	14	2.1	Mineral Items	11	1.6
Others	28	4.1	Others	34	5.0
<b>Total</b>	<b>675</b>	<b>100.0</b>	<b>Total</b>	<b>675</b>	<b>100.0</b>

## Claims Summaries (CU732044 Log Hauling)

Year Range: 2013 - 2017

Nature of Injury	Count	%	Body Part	Count	%
Other Strains	252	37.3	Shoulders	89	13.2
Fractures	118	17.5	Other	83	12.3
Back Strain	71	10.5	Back	80	11.9
Contusion	59	8.7	Wrist, Fingers & Hand	68	10.1
Concussion	49	7.3	Other Head	49	7.3
Laceration	32	4.7	Knee	42	6.2
Hearing Loss	29	4.3	Face & Ears	38	5.6
Dislocation	12	1.8	Chest	36	5.3
Abrasion	7	1.0	Ankle, Toe & Feet	34	5.0
Tendinitis, Tenosynovitis	7	1.0	Other Lower Extremity	26	3.9
Others	39	5.8	Others	130	19.3
<b>Total</b>	<b>675</b>	<b>100.0</b>	<b>Total</b>	<b>675</b>	<b>100.0</b>

## Seeing Machines project update – measuring fatigue in log truck drivers

Earlier this year (April 2018), TimberWest initiated an evaluation of Seeing Machines, an in-cab fatigue and distraction monitoring and intervention system. Two of the company's log truck driver contractors volunteered to participate in the study managed by the BC Forest Safety Council's

transportation department. FPIinnovations took the lead in evaluating the fatigue monitoring technology.

The Seeing Machines system alerts drivers in real-time through an audible alarm and seat vibration when fatigue is detected (and audible alarm when distractions are detected). Additionally managers are alerted about driver fatigue in real-time if cellular connection with the device is established, or once the unit enters cellular range. Using Readiband wrist wearable devices, sleep and fatigue data was also collected to see if there was a correlation between fatigue events and predictive fatigue levels.

## The results

Distracted driving events were observed in almost all of the drivers that participated in the study. Some restricted behaviours (cell phone use, no seat belt) were also observed. Vehicle lane departure was observed during some distraction and fatigue events.

Some improvement was observed between baseline and active fatigue management periods. The glance away/distraction duration was considerably reduced during active fatigue management. Reduction in glance away duration was likely due to in-cab alerts.

*Continued on page 10...*



# Transportation

Continued from page 9...

## System overly sensitive

Driver survey feedback indicates that they consider the system to be too sensitive because of the frequency of false positive alerts. This belief is supported by the Readiband data. However, drivers thought the system was effective in managing fatigue and distraction. Feedback was also solicited from the two contractor principals. Both contractors support this system, however, successful implementation would require industry-wide implementation and they believed that some tweaking would also be required for the system to be adopted in logging operations.

Industry recognizes that driver fatigue can be a factor in motor vehicle incidents. One option to consider when implementing a fatigue management program is to have access to valid metrics using onboard technologies that alert drivers and fleet managers when the system detects driver

fatigue. By incorporating knowledge of fatigue management strategies, companies and drivers could implement appropriate measures to reduce the risk of fatigue-related motor vehicle incidents.

Technology like Seeing Machines could play an important role in fatigue and distraction management by creating awareness of driver behaviours. In-cab alerts have the potential to reduce the risk of incidents where fatigue or distraction are contributing factors. Seeing Machines seems promising as a tool for improving safety in the log hauling sector, provided barriers to driver acceptability are addressed.

## Next steps

The next steps include working with Seeing Machines to eliminate false positive alerts for distraction events which would address drivers' concerns and improve their acceptance of the system. Discussion and

awareness regarding driver fatigue and distraction needs to continue in consultation with industry, fleet owners and drivers to develop strategies that reduce the risk of fatigue- and distraction-related incidents. Technology can be a key component of a safety program but is not the complete solution in managing fatigue and distraction within the log hauling sector. Other components include education, training, best practice schedule planning, supervision, fatigue management systems covering policies and procedures, workplace culture, health, nutrition and hydration, and other support tools and solutions.

The study was conducted in 12 hour day shift operations. To better understand the effectiveness of Seeing Machines technology, a trial is being considered in other BC log hauling operations where there are longer duty hours and night shift operations. 🚚

## Kindness is a valuable driving skill to help keep everyone safe

*There is always a lot of social media and other media coverage over road rage incidents.*

*Here's a look at kindness – a skill that can help keep us cool, focused on driving, and safe! The following content is printed with the approval of the author, a long haul trucker, Al Goodhall, of [www.truckingacrosscanada.blogspot.com](http://www.truckingacrosscanada.blogspot.com).*

Kindness isn't something we would normally discuss as a required 'skill' when it comes to driving. We discuss road rage a great deal, however, and recognize that anger sitting firmly in the mind of a driver is not something that leads to the skillful operation of a motor vehicle.

So, we are well aware that anger is a detriment to road safety and actively discuss its negative effects but we rarely, if ever, talk about kindness as a skill to be taught, which will enhance road safety.

Maybe teaching kindness is too much to ask. Perhaps talking about it is enough to get us to consciously include it as part of our daily lives. What would that look like out on the road? An example of this is the friction that exists today between the driving public and commercial vehicles, specifically logging trucks. Based on media accounts, we're well aware that in collisions between light vehicles and commercial transports, the result in many cases is those in the light vehicle are more often seriously injured or killed.

The big problem we face on all our roadways is a prevailing 'me first' attitude on the part of drivers. In a world where kindness, compassion, and courtesy guide how we interact with our fellow man, fault should not be a factor. Our responsibility is to keep others safe. Period.

To be kind as a driver is to adopt defensive driving skills and to put them into play 100% of the time when behind the wheel. This requires a great deal of introspection and self-accountability on the part of every person that holds a driver's licence. It's not an option. It is our moral obligation.

Obeying traffic laws and developing habits that leave ample space for other road users to make a mistake without killing themselves is a generous act. Bringing patience to your driving experience is the first step in becoming a kind and courteous driver. Putting time on the back burner of your mind is a necessity. If you are always in haste as a driver, a fatal mistake is always waiting in the wings.

Impatience is a sure way to elevate the level of risk to those around you and to yourself. Putting aside all your distractions, including thoughts of anything but driving, is an act of generosity and kindness.

As long as we are asked to eliminate road deaths and road violence by simply following the rules, we can't ignore our emotions and how they play out on our roadways and in our neighborhoods. Yes, kindness is a skill, and something we need to teach. 🚚